PRESIDENCY UNIVERSITY

BENGALURU
School of Information and Science
Mid - Term Examinations - November 2024

Semester: III

Course Code: CSA2018

Course Name: Data Modeling And Visualization

Program: BCA

Date: 07-11-2024

Time: 02.00pm to 03.30pm

Max Marks: 50

Weightage: 25%

Instructions:
  (i) Read all questions carefully and answer accordingly.
  (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.   **5Qx2M=10M**

1	What are some essential skills required for data scientist?	2 Marks	L1	CO1
2	What are the key steps in the data modeling process?	2 Marks	L1	CO1
3	Define outliers.	2 Marks	L1	CO2
4	List common techniques used in EDA.	2 Marks	L1	CO2
5	What is feature?	2 Marks	L1	CO2

Part B

Answer ALL Questions. Each question carries 10 marks.   **4QX10M=40M**

6	Analyze the effect of transforming numerical variables on model performance.	10 Marks	L4	CO1

Or

7	Explain different feature scaling methods.	10 Marks	L4	CO1
8	Assess the potential biases introduced by different imputation techniques	10 Marks	L5	CO1

Or

9		Analyze categorical values encoding techniques	10 Marks	L5	CO1
10	a.	Explain the advantages of Exploratory data analysis	4 Marks	L2	CO2
	b.	How does EDA differ from classical and Bayesian approaches	6 Marks	L4	CO2

Or

11	a.	Why is exploratory data analysis important in data science?	4 Marks	L2	CO2
	b.	Describe steps involved in EDA	6 Marks	L4	CO2
12	a.	What are the common Exploratory Data Analysis tools	4 Marks	L2	CO2
	b.	Write a code to plot the Correlation matrix.	6 Marks	L3	CO2

Or

13	a.	What are the key characteristics of Bayesian analysis?	4 Marks	L2	CO2
	b.	Write a code to create scatter plot.	6 Marks	L3	CO2